R.S. Mutual Water Co.

P.O. Box 335, Wofford Heights, CA 93285

2013 CONSUMER CONFIDENCE REPORT

We test the drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2013.

Este informe contiene información muy importante sobre su aqua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

Our water source is one well drawing ground water from deep aquifers emanating from the Greenhorn Mountain drainage. Water is pumped directly from the well to the tank where it's aerated, then returns to the system for consumption. In the below tables you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

AL=Regulatory Action Level-The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
MCL=Maximum Contaminant Level - The "Maximum Allowed" is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLGs and PHGs as is economically or technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.
MCLG/PHG = *Maximum Contaminant Level Goal/Public Health Goal* - The "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency. PHGs are set by the Calif. Environmental Protection Agency.
MFL= *Million Fibers per Liter* -Million fibers per liter is a measure of the presence of asbestos fibers in water that are longer than 10 micrometers in length.
NTU = *Nephelometric Turbidity Unit* - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
ND = *Non-Detected* - Not detectable at testing limit
N/A = *Non-Applicable* - Doesn't apply in this application.
pCi/L = *Picocuries per liter* - Picocuries per liter is a measure of the radioactivity in water
ppb = *Parts per billion or Micrograms per liter* (µg/L)- One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
ppm = *Parts per million or Milligrams per liter (mg/L)* - One part per million corresponds to one minute in two years, or a single penny in $10,000.
ppq = *Parts per quadrillion or picograms per liter (pg/L)* - One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in $10,000,000,000,000.
ppt = *Parts per trillion or nanograms per liter (ng/L)* - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.
PDWS=Primary Drinking Water Standards-MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
SDWS= Secondary Drinking Water Standards- MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.
TT = *Treatment Technique* - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
Variances and Exemptions:, Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk because MCL's are set at very stringent levels.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include;

- *Microbial contaminants*, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- *Radioactive contaminants*, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA and the State Department of Health Services (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

The below tables report only detectable constituents found in our water.

TEST RESULTS (Primary Drinking Water Standards.)						
Contaminant	**Viol.**	**Level ✗ Detected**	**Unit Measurement**	**MCLG /PHG**	**MCL**	**Likely Source of Contamination**
MICROBIOLOGICAL CONTAMINANTS						
Total Coliform bacteria	NO	NONE	Sampling Frequency; One sample per month.	0	Not to exceed one positive sample per month.	Naturally present in the environment.
Fecal Coliform or E. Coli	NO	NONE	Required if total coliform is found in any sample..	0	A routine sample detect total coli-form and either sample also detects fecal coliform or *E. Coli.*	Human and animal fecal waste.

SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER					
LEAD AND COPPER	No of samples collected	90^{th} percentile level detected	No. Sites exceeding AL	AL	Typical Source of Contaminant
Lead (ppm)	5	.00215	0	.015	Internal corrosion of household water plumbing systems: discharges from industrial manufacturers;, erosion of natural deposits.
Copper (ppb)	5	.3605	0	1.3	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

SAMPLING RESULTS FOR SODIUM AND HARDNESS			
Chemical or constituent	Sample Date	Level Detected	Typical Source of Contaminant
Sodium (ppm)	9-30-12	37.0 ppm	Generally found in ground and surface water
Hardness (ppm)	9-30-12	400.0 ppm	Water having a high concentration of calcium and magnesium ions.

RADIOACTIVE CONTAMINANTS					
Contaminant	Violation Yes/No	Level Detected	Unit Measurement	MCL	Typical Source of Contaminant
Gross Beta Activity	NO	N/A	mrem/yr	4	Decay of natural and man-made deposits.
Gross Alpha Activity	NO	N/A	pCi/L	15	Erosion of Natural deposits.
Radium 226 & 228 (total)	NO	N/A	pCi/L	3	Decay of natural and man-made deposits.
Uranium	**YES**	23.0-5/13, 7/13, 9/13, 10/13	pCi/L	20	Erosion of natural deposits. Intakes of uranium exceeding EPA standards can lead to increased cancer risk, liver damage, or both. Long term chronic intakes of uranium isotopes in food, water, or air can lead to internal irradiation and/or chemical toxicity.

Sampling for Radium 226, 228, and Uranium is required only when the Gross Alpha exceeds 5 pCi/L.

Contaminant	**Viol. Y/N**	**Level ✗ Detected**	**Unit Measurement**	**MCLG /PHG**	**MCL**	**Likely Source of Contamination**
Aluminum	NO	< 50.0	ppb	N/A	1000	Erosion of natural deposits; residue from some surface water treatment processes.
Antimony	NO	< 2.0	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics, electronics, solder.
Arsenic	**YES**	12.0-3/13 11.0 -5/13, 7/13, 9/13	ppb	N/A	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes. Read more on last page.
Asbestos	NO	ND	MFL	7	7	Decay of asbestos cement water mains; erosion of natural deposits.
Barium	NO	22.0	ppb	100	1000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Beryllium	NO	< 1.0	ppb	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries.
Cadmium	NO	< 1.0	ppb	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints.
Chromium	NO	< 10.0	ppb	50	50	Discharge from steel and pulp mills; erosion of natural deposits.
Copper	NO	< 10	ppb	1000	1000	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Cyanide	NO	N/A	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories.
Fluoride	NO	.26	ppm	1.4	1.4 to 2.4 Temp. depend.	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories.
Mercury	NO	< .20	ppb	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from crop land.
Nickel	NO	< 10.0	ppb	100	100	Occurs naturally in soils & ground water; discharge from mining and refining operations
Nitrite	NO	< 50.0	ppb	1000	1000	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nitrate	**YES**	46 – 9/13	ppm		45	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits. Nitrates in water can cause severe illness in infants and domestic animals.
Perchlorate	NO	ND	ppb	0	5	Used in manufacturing rocket fuel, munitions, and fireworks.

Selenium	NO	< 2.0	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
Silver	NO	< 10.0	ppb	N/A	100	Naturally occurring in ground water.
Thallium	NO	< 1.0	ppb	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories.
Vanadium	NO	N/D	ppb	N/A	1000	Naturally occurring, primarily used in steel manufacturing.

SECONDARY DRINKING WATER STANDARDS		
SECONDARY DRINKING WATER STANDARDS	**Level ✗Detected**	**Preferred Health Goal (PHG) or MCL**
Atrazine	ND ppm	0.15 (PHG) – 3.0 (MCL)
Chloride (C1)	500 ppm	250-600 ppm (MCL)
Color	15 units	15 units (SMCL)
Corrosivity	non-corrosive	non-corrosive
Iron	300.0 ppm	< 50.0 ppm
Manganese	50.0 ppb	< 10.0 ppb
MBAS (Foaming Agents)	0.20 ppm	< 0.20
Odor Threshold at 60 ° (deg.)	1.0 OT#	3.0 (SMCL)
pH	7.56	6.8 / 8.5
Simazine	ND	4.0 (MCL)
Sulfate (SO4)	47.0 ppm	600 (MCL)
Turbidity	.15 NTU	5 NTU
Zinc	ND	5 ppm

✱Range of Acceptable levels; Recommended-Upper-Short Term.

ADDITIONAL TESTING	Level ✗Detected
Total Alkalinity (as CaCO3)	280.0 ppm
Total Hardness (as CaCO3)	400.0 ppm
Bicarbonate	340 ppm
Calcium	110 ppm
Carbonate	< 2.5 ppm
Hydroxide	< 1.4 ppm
Magnesium	33 ppm
Potassium	1.9 ppm

The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Thus, some of our data, though representative, is more than one year old.

NOTE: Primary drinking water standards are mandatory health-related standards. Secondary standards are based on the aesthetic quality of the water. Both types of standards are established by the State of California Department of Health Services, Division of Drinking water and Environmental Management, and the U.S. Environmental Protection Agency. **Due to our high concentrations of Arsenic, Uranium and Nitrates; we are required to put out a DO NOT DRINK order every three months. Our water is not for consumption but can be used in all other capacities.**

✗✗✗Nitrate in drinking water at levels above 45 ppm (nitrate as nitrate) is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. High nitrate levels can also increase the risk of a particular kind of anemia in pregnant women. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

ARSENIC: The standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The California Department of Health Service continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and other circulatory problems.